Electricity on the Farm

A MONTHLY MAGAZINE FOR THE UP-TO-DATE RURAL FAMILY

What is your title for this picture?

10 Cash awards will be given for the best.

(*See inside back cover for details*)

MAY
1936

2 OVENS FOR BIG MEALS

Roast anything as large as a 25 lb. turkey in one oven while baking in the other. Both ovens operate *automatically*. No attention required. A scientific "heat-evener" in each oven increases *usable* space 25%. Thick insulation seals in the heat — saves electricity. It's the clean, convenient, economical cooking method every farm home should enjoy.

FACTFUL BOOK FREE

Tells how the new "Economizer" speed unit cuts electric cooking costs 18%. Shows and describes new features like automatic oven lighting, two-temperature automatic roasting control. Points out many savings electricity assures. Pictures all models. See your electric company about low prices — or write for a copy of this book. Westinghouse Electric & Mfg. Company, Dept. E.F., Mansfield, O.

Westinghouse

GOLDEN JUBILEE ELECTRIC RANGES

WESTINGHOUSE W GOLDEN JUBILEE

Growing things need water!

SUPPLY IT WITH A GOULDS WATER SYSTEM

WATER aplenty—fresh, flowing water—keeps children healthy, clean and happy . . . keeps live stock and poultry in prime condition—for increased yield of milk and eggs . . . keeps garden and field yields up in quality and quantity . . . keeps houses and barns clean and sanitary—protects them against fire loss. Nothing takes the place of a water supply system, and nothing you can do with the price of a Goulds water supply system will get you more value for the money.

Goulds Fig. C-2542 shallow well water supply system. Capacity 250 gallons per hour.

Goulds CID Pumps are available in shallow and deep well types to meet every capacity requirement. Extra strength in every part, fine materials and honest workmanship assure dependable, trouble-free service year in and year out.

For comfort, convenience and profit *Buy now—Buy the Best—Buy Goulds.*

GOULDS

GOULDS PUMPS, INC., 340 Fall St., Seneca Falls, N. Y.

Please send me booklet on Shallow Well ( ). Deep Well ( ) Water Supply Systems.

Name ..... St. or R.F.D. .....

Town ..... State .....

6054

May, 1936

Electricity on the Farm

Vol. 9, No. 5

EDITORIAL

DEFEATING DROUGHT

The conspicuous success of irrigation, using underground water, on the Pacific Coast forecasts the future trend in irrigation in areas having independable rainfall or having no streams available for irrigation purposes.

Even sections of the country usually enjoying sufficient rain to mature crops are gradually turning to irrigation with well supplies, for it has been found that an occasional dry year makes profitable the investment in the necessary pumping equipment.

Underground supplies are more satisfactory than surface streams, particularly when canals used by groups of farmers are employed. Frequent inability to take water just when needed, in such instances as when period of water withdrawal is specified by contract or agreement, and the tendency of canals to carry weed seeds from one farm to another, are serious disadvantages of the system.

Underground water, pumped by electrically driven pumps, affords a dependable and convenient supply. The pump starts instantly upon the closing of the electric switch, and it continues to operate without attention as long as desired. Electrical power is economical, too.

The benefits of the motor driven pump are not confined to irrigation either. It has power equally effective in the South in removing water from areas inundated by heavy rains or overflowing streams. In this latter operation water is forced through light metal pipes or fire hose lines to a point where it will do no harm. And the pumps are ofttimes required to run 24 hours a day for several days—and without any attention.

With such dependability and economy, it is not surprising that electrical irrigation equipment rapidly grows in popularity wherever used.

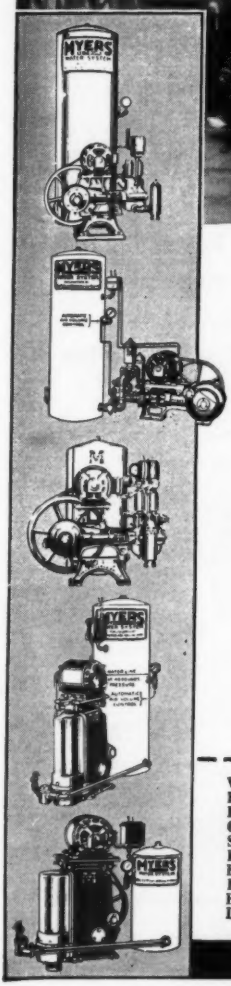
FRED SHEPPERD.

Issued Monthly by
CASE-SHEPPERD-MANN PUBLISHING CORP.
Editorial-Executive Offices: 24 West 40th Street, New York
KARL M. MANN, *President* — I. H. CASE, *Vice-Pres. and Gen'l Mgr.*
FRED SHEPPERD, *Editorial Director* — JESSE H. NEAL, *Vice-President*
K. H. GORHAM, *Advertising Manager*
CHICAGO: 6 No. Michigan Ave.—W. S. CLEVENGER, Western Manager; L. M. ROCHE, Western Representative
SAN FRANCISCO: 444 Market St., Room 305—C. H. WOOLLEY
Subscription price, 75 cents per year; single copies, 10 cents; Special Bulk Rates on Application
Contents Copyrighted 1936 by Case-Shepperd-Mann Pub. Corp.

RUNNING WATER . . . "and here is the water system"

Suppose you could visit the many farm families that already enjoy running water and single out those whose water systems have given them the most satisfactory service for the greatest number of years. Thousands of such folks would proudly show you a reliable MYERS.

MYERS
WATER SYSTEMS



OWNERS frequently testify that their MYERS has furnished a constant supply of fresh running water for years, without a single interruption or expense for repairs. Performance — durability — economy — you get them all in a MYERS; and, at present low prices, these high grade water systems certainly offer wonderful values. Styles and sizes to meet all needs. For use with deep or shallow wells, cisterns, springs, ponds or streams. Financing can be arranged through our local dealer. Send the coupon today for free information.

THE F. E. MYERS & BRO. CO.
1124 FOURTH STREET, ASHLAND, OHIO
"Pump Builders Since 1870"

RUNNING WATER
YOUR FAMILY DESERVES IT

Water Systems	☐
Hand Pumps	☐
Power Pumps	☐
Centrifugal Pumps	☐
Sump Pumps	☐
Pump Jacks	☐
Hand Sprayers	☐
Power Sprayers	☐
Hay Tools	☐
Door Hangers	☐

THE F. E. MYERS & BRO. CO.
1124 Fourth Street, Ashland, Ohio

Send me information on items marked and name of your nearest dealer.

NAME .....

ADDRESS W-20

Take Off Your Hat To The MYERS

You're safe with Proof!

THE NEW FRIGIDAIRE

WITH THE "METER-MISER"

MEETS ALL FIVE STANDARDS FOR REFRIGERATOR BUYING

. . . and proves it!

1. **Lower Operating Cost**
2. **Safer Food Protection**
3. **Faster Freezing—More Ice**
4. **More Usability**
5. **Five-Year Protection Plan**

MEET THE "Meter-Miser"
Simplest Refrigerating Mechanism Ever Built
It Cuts Current Cost to the Bone
Frigidaire's sensational cold-making unit gives more cold for less current cost. Built with only three moving parts, permanently oiled and sealed against moisture and dirt. It comes to you protected for Five Years against service expense.
FRIGIDAIRE
MADE ONLY BY GENERAL MOTORS

Look for this Name-Plate

● **Frigidaire brings you a new way—a *safe, sure* way to buy your refrigerator. There's no more guessing. No more risking your money on mere claims. You buy on *proof*—and *proof* alone! Go to your nearest authorized Frigidaire dealer and see *proof* that Frigidaire with the Meter-Miser gives you Safer Food Protection . . . Freezes More Ice, Faster . . . on just a miserly amount of current. See the beautiful, more usable cabinets with much more space *in front* . . . Full-Width Sliding Shelves, Portable Utility Shelf, Double-Range Cold Control, Automatic Ice-Tray Release and scores of other genuine advantages. *You Can't Beat Proof!***

Send for free 32-page booklet, beautifully illustrated, describing in detail the New Frigidaire with the Meter-Miser. Frigidaire Corporation, Dayton, Ohio.

Sprinklers in operation in an orchard.

ORCHARD IRRIGATION IS PROFITABLE

By J. C. SCOTT
Agricultural Engineer

WHILE the practice of irrigating orchards is so common in arid sections of the United States that it would seem unimportant to discuss the advantages, yet experience of recent years indicates that even in sections where the annual precipitation is more than 30 inches, irrigation of the orchard is profitable.

In 1926, I found Mr. E. W. Bayes, in the northwest part of Washington, where the annual rainfall is usually well over 30 inches, irrigating a 40-acre pear orchard. When asked if he considered it a paying practice to irrigate the orchard Mr. Bayes said: "I really cannot afford not to irrigate. Irrigation keeps the pears growing to full development during the dry months, and at the same time keeps the fruit spurs growing so that they will be fully developed for the next year's crop. Irrigation is the difference between the ordinary orchard crop every other year and a good crop every year."

Observations during the past ten years, of the experience of farmers, would indicate that irrigation is one of the orchard practices necessary to insure a maximum crop each year, in relatively humid, as well as arid sections.

There are two main problems in connection with orchard irrigation. The first to be considered is the source of water, and the second is the method of distributing the water over the land.

J. C. Scott

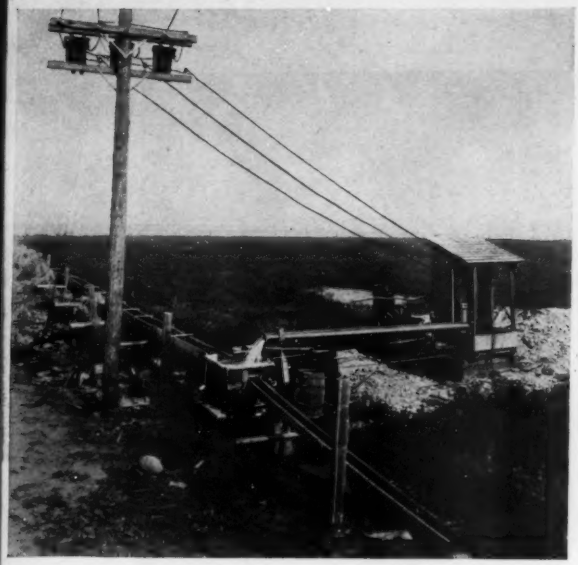
In the irrigation sections, that is, in arid sections where it is impossible to produce without irrigation, water is most generally obtained by diversion of water from streams or rivers, and by carrying it through canals and flumes to where it can be distributed onto the land.

However, there are in Washington hundreds of farmers who obtain their water by means of electrically driven pumps, the water obtained from streams, lakes and wells. In the Wenatchee Valley alone, 557 orchardists are now obtaining their water for irrigating the orchard, by this means.

The most economical system of irrigation, of course, is where the orchard is located near a stream with sufficient fall, that the water can be diverted from the stream a short distance above the ranch. Comparatively few orchardists have this natural advantage. It is generally necessary to organize irrigation districts or associations, which construct large canals and secondary ditches through which the water is distributed to several hundred acres of orchard land.

On first consideration it would seem that this system is much more satisfactory and economical than pumping.

While it is impossible to make a statement that would apply to all farms, yet in many instances it is more economical to pump by electric power than to pay the charges in irrigation districts for interest on bonds, and maintenance



Typical irrigation well with electrically driven pump in operation.

of the irrigation system.

It is a common practice in many irrigation districts for water to be supplied to the farmers for irrigation, at intervals, because of a lack of sufficient water to irrigate the entire project at one time. Regardless of whether a man has irrigated the orchard or not, the water must be shut off for a number of days or weeks, and there are times when this works a hardship on a man who is endeavoring to develop a maximum crop of high quality fruit. With a private irrigation pump and motor, and a reliable source of water, the orchardist has an opportunity to manage his own irrigation practices in accordance with the needs of his land. It can be irrigated when irrigation is needed, and the water cut off when not needed.

Weeds are another source of difficulty to the farmer whose irrigation water travels through several neighbors' farms. If the farmers above are careless in controlling obnoxious weeds, it will be almost impossible for the farmer below to successfully combat this menace, as seeds are continually being scattered, through the irrigation water. This particular difficulty is eliminated when the water is obtained by pumping from a well.

In considering the various sources of water it should be borne clearly in mind that many mistakes are made by farmers installing their own irrigation pump, motor and distribution systems. Several surveys have been made in Washington, in connection with the operating characteristics of irrigation pumping units. Pump and motor efficiency were found to range from 10% to 70%. In other words, some farmers were getting seven times as much water for each dollar expended for electricity, per foot of lift, as were others.

The centrifugal pump has proved most satisfactory, and is in universal use for irrigation, because it delivers large quantities of water more economically, over long periods of time, than any other type of pump.

However, there is a particular pump for each irrigation job. Irrigation pumps cannot be bought off the shelf, so to speak, as other farm equipment is purchased. The type of pump depends upon the elevation from the water in the well or in the stream, to the highest points on the land where it is to be delivered; the amount of water desired, that is, in gallons per minute; the distance it is to be pumped through pipes; and whether or not the water is to be distributed by flood or sprinkling method. A variation in any of these conditions may or may not necessitate a different sized pump, but generally will necessitate a different impeller in the pump.

Consequently, there is only one method by which we recommend that farmers buy irrigation equipment. See that it is engineered properly by a reputable pump company's engineer, who, after determining the above prerequisites, can recommend the right sized pump with the proper impeller and the right motor for that particular job.

However, the efficiency of the pump and motor, that is, the right pump and motor to do the job, and its mechanical state of repair, is only one of about ten factors which determine the cost of irrigation by pumping. The second is the amount of water needed for each acre; third, the

Furrow method of irrigation, showing preparation of lands for orchard planting.

Irrigated orchard in arid area, showing alfalfa cover crop which is never cut but left to rot on the ground.

elevation to which the water must be lifted; fourth, length of the suction pipe; fifth, length of discharge pipe; sixth, number of bends in the suction and discharge pipe (each bend increases power requirements); seventh, system of irrigation, that is, ditch, flooding or sprinkling; eighth, fluctuation of water level in well or stream; ninth, skill of the irrigator.

For surface or flood irrigation, current consumption generally ranges from 2 to 4 kilowatt hours an acre foot of water for each foot of lift. (By lift we mean the total elevation from water source to point of delivery.)

If it is intended to irrigate by the use of the sprinkler system, add 50 ft. to the lift, in calculating current consumption.

The above formula is based on average installations. This general rule will not work out where pipes and valves are too small to handle the amount of water for which the pump was designed. It is just as important to get correct engineering advice with regard to the size of pipe, as with regard to the right pump and motor for a given irrigation job.

Our next consideration is the method of distributing water on the land. There are three different methods in use. (1) Surface irrigation, or delivery of water over the ground, generally by furrow or flooding; (2) sub-irrigation, where the water is delivered to the root zone of plants by some underground method; (3) sprinkler irrigation, where water is delivered under pressure, in pipes, and applied in the form of fine drops, spray, or mist, through sprinkler heads or some perforated pipe.

The surface method usually demands that the ground be levelled and prepared so the water will run evenly down the slopes; or, where the ground is perfectly level, it can be dyked so that sections of the land are completely flooded. There is some deviation from these practices in irrigating pasture lands, where movable sheet metal pipe or large canvas hose is arranged to deliver the water to the high spots on the land, where it can be spread from the small knolls.

Sub-irrigation can be practised only where a natural condition of subsoil and water supply permits.

While sprinkling demands a higher installation and power cost, yet it has much in its favor, as there is no necessity of preparing the land, building dykes, ditches, or rills, and it is a much simpler job for the irrigator. In fact, the sprinkling method of irrigation is being used to a certain extent in regular irrigation territories.

In 1932 experiments were carried on by the State College of Washington Agricultural Experiment Station specialists, working in the Wenatchee Valley, and according to their report:

"The utilization by the trees of plant nutrients in the surface soils is favored by sprinkling, over the flooding method of irrigation.

"Sprinklers make it possible to apply water more uniformly over areas to be irrigated, regardless of soil type or slope of land. On bare soil, however, when sprinkler water is applied faster than the soil can readily absorb it, puddles or washing of the soil may result."

In eastern Washington, where there is practically no rainfall during the growing season, this report says:

"When properly applied, without waste, 30 to 36 acre inches of water is generally sufficient to keep the main root zone of the soil supplied during the growing season.

"Since the sprinkler system wets the surface soil uniformly, it provides excellent moisture conditions for generation and initial growth of a new crop in the orchard. NOTE: It is a common practice, among eastern Washington orchardists, to grow a cover crop of alfalfa in the orchard, never cutting it, but leaving the alfalfa to act as fertilizer.

"Trees in sprinkled plots during the experimental period made greater terminal growth and tended to produce larger sized leaves and fruits, notwithstanding the fact that less water was applied, than did trees irrigated by the furrow system.

"The average amount of intensity of color of the fruit which ripened into maturity, was slightly delayed by the use of sprinklers as compared with the rill-irrigated trees.

"The overhead sprinkling, that is, where the water was allowed to fall on the tops of the trees, has no value in coddling moth control, but instead interferes with the proper control by spraying methods.

"The aphis infestations and leaf hopper injury were not affected by sprinkling.

"Overhead sprinkling, however, seemed to aid in the control of red spiders."

Ground sprinklers, that is, low sprinklers, which delivered water under the trees, is more applicable

(*Continued on page 29*)

BUTTER TO MARKET

By CHAS. E. SEITZ

"SINCE I started using an electric churn I can be assured that each new customers I get will always be a customer. Both butter and buttermilk are 100 per cent better when churned in the electric churn than by the old method," said Mrs. S. C. Oliver, when the writer recently visited her farm near Suffolk, Virginia. This farm home has practically all of the modern conveniences, most of which were made possible by the income from the delicious butter which Mrs. Oliver makes. She has established an enviable reputation for this product and holds the electric churn largely responsible for its popularity on many Suffolk dinner tables.

The good old practice of farm to market with country butter, eggs and other farm products has been rapidly giving way to large scale processing plants. This trend has been especially true of dairy products. Rigid state health, sanitary and pure food laws have made the buying public of farm dairly products "sanitary conscious," and the development of modern dairy manufacturing equipment is the big answer to the demand of the law and the masses. These new methods of manufacturing and handling dairy products not only assure the buying public clean, fresh products, but large-scale production has often reduced the unit cost of these products to the consumer.

In spite of modern manufacturing processes, there are still many city dwellers who much prefer good homemade country butter. The market for good country butter is still almost unlimited, provided the product meets the quality requirements of the consumer. Electricity has again proved to be the farmer's friend by coming to the rescue of the small milk producer, enabling him, through the use of a very simple and inexpensive piece of equipment, the electric churn, to produce country butter of such quality and purity that it will meet the requirements of the most exacting consumer.

A number of general farmers who live around Virginia cities and have several dairy cows are realizing a definite net income from the sale of high-quality butter to private city customers. The electric churn has changed the task of churning from a back-breaking, tiresome procedure into an easy and interesting manufacturing process. It has also so speeded up the churning process that a comparatively large quantity of butter can be made and "worked" in a short time.

In a county-wide survey made by one of our graduate students last summer of 516 farm electric customers in Roanoke County, 54 of the farmers were using electric churns. On practically all of these farms using churns the farm woman ranked it high as to its utility and worth. Many of the farm women were deriving nice incomes from their butter making. These women were almost unanimous in saying that they would not do without the electric churn. In practically all cases where butter was being sold, the income derived from the sale of butter was more than sufficient to pay the entire electric bill for the farm. This is a good illustration of how even one piece of electric equipment on the farm can be made to pay big dividends and justify electric service.

For example, Mrs. J. E. Jamison of Roanoke County says: "We churn and sell 70 pounds of butter and 130 gallons of buttermilk to private customers in Roanoke each week. I place about

Above: "The most valuable and appreciated Christmas present I could have received at any price," says Mrs. Lacy of her new electric churn.

Left: Mrs. D. H. Hoffman's ten gallon hand churn rigged up for operation from an electrically powered line shaft.

seven gallons of cream in my ten-gallon home-made electric churn, and while this batch is being churned I get the butter-working equipment ready. I then work the butter from the first churning while the little quarter-horsepower electric motor is busy churning a second batch. This process only requires the time of one person and works out perfectly. By being able to keep the churn going after I start using it, the quality of the butter and buttermilk is greatly increased, because the possibility of odors forming by the churn standing idle is eliminated. I am able to do all this only with the assistance of that little electric motor, which never grumbles at working for about one penny per hour. I couldn't possibly keep up either the quantity or quality of the products I sell without its help."

There are any number of electric churns on the market for doing the job just as Mrs. Jamison describes it. However, practically every farmer already has a hand churn, and many of these can easily be changed to electric operation, just as the Jamison churn was converted. The photograph shows how, by a system of belts and pulleys, Mr. Jamison easily electrified the old hand churn. Sometimes the electric motor is so fixed that it is detachable and can be removed from the churn and used for other jobs, such as turning the grindstone, emery wheel, ice cream freezer, and many small pieces of farm equipment.

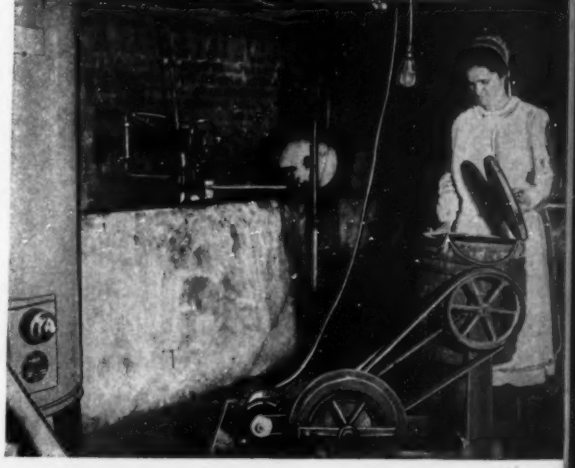
Mrs. O. H. Huffman, also of Roanoke County, operates her ten-gallon churn from a line shaft driven by a one-horsepower electric motor. Mrs. Huffman says: "We use the electric motor on our deep-well pump. It was a lucky day for me when my husband installed the line shaft and replaced the handle on the churn with a pulley. The motor now does two important jobs instead of one at practically no additional cost, because we always pump water into the elevated tank while the churn is being operated." Since changing the churning job from one of drudgery to a pleasant farm task, Mrs. Huffman has increased her butter sales to nearby Roanoke homes to 35 pounds per week, receiving premium prices for it, which is a welcome extra income indeed.

When asked about the convenience and value of her electric churn, Mrs. J. C. Lacy, Route No. 3, Richmond, Virginia, said: "Churning by hand has always been one of the meanest jobs I've had to do on the farm. It really is a tiresome, nerve-wrecking job. I though I was the only member of my family who realized this, but I was wrong. Imagine my delight on Christmas morning when I found that my son had given me a new ten-gallon electric churn! At first I thought it was a rather expensive present, and that it would surely be expensive to operate. Being a woman, I hate to admit that I was wrong again, but admit it I must. I found that the churn was very simple to operate; simply plug it in the nearest convenience outlet, throw in the clutch and forget it until the butter is ready to be removed. It costs less than one cent per hour to operate, and since it churns five gallons of cream in three to eight minutes, the operating cost is negligible. After considering the convenience, low operating cost and the great labor saver it has proven to be, I am sure my churn is the most valuable and appreciated Christmas present I could have received at any price."

Electric Churns Not Costly

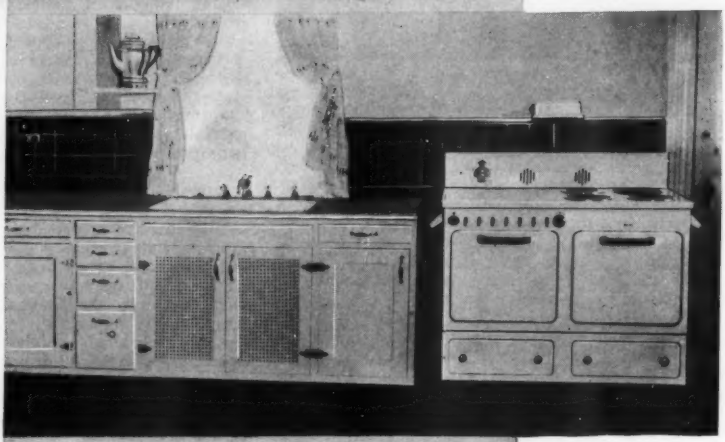
Electric churns of many proven satisfactory types may be purchased for as little as $25. There are also many ways of converting hand operated churns that might be considered too good to discard into electrically operated churns, without spending but very little money. This can be done by using belts and pulleys or reduction gears to reduce the speed from the motor so that the churn will operate at about 50 to 60 revolutions per minute, depending on the type of churn.

The use of electricity for churning is just one of the many small applications and uses of electricity on the farm that really take the drudgery from farm work. No farm housewife can ever appreciate and enjoy the use of electricity to the fullest extent without putting it to work doing small but tiresome jobs, such as churning.



Above: I have read many novels while my electric churn was churning, says Mrs. S. C. Oliver, Suffolk, Va. She is shown here with the churn she has used for over ten years.

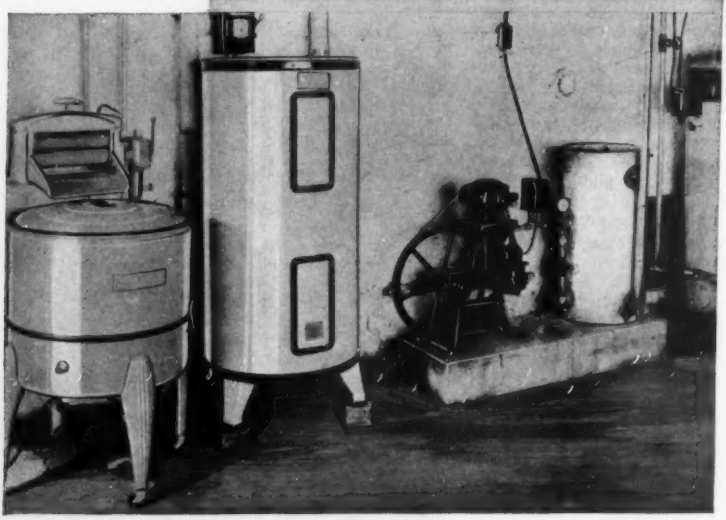
Right: Mrs. S. H. Brunk of Fentress, Va., and her five gallon barrel type electric churn. The churn was originally hand operated. A one-quarter horse-power motor now does the job.



Electrical appliances do their share of lightening the kitchen duties on the Boes Farm.

The electric range was the first piece of equipment purchased.

Electricity does the washing, heats water, as well as pumps the water supply for use on this modern farm.



OUR CHEAPEST and BEST SERVANT

By FRANK L. WALKER

WHEN driving west from Tiffin, Ohio, toward Fostoria on State Route No. 18, the traveler is always impressed by the sight of an attractive set of farm buildings which constiutes the home of Mr. and Mrs. Herman Boes. Their farm which comprised two hundred acres of good corn land is operated as a general farm.

In 1931 Mr. Boes secured electric service, and since that time has devoted considerable time and study in applying the services of electricity to the many jobs that have to be done when operating a successful farm. Every piece of electrical equipment installed by Mr. Boes was purchased only after he and his wife were convinced that it would fulfill their needs and requirements better than the old equipment. They are certain that electricity is the cheapest and best help that can be secured.

When asked what factors were consireded in the purchase of his electrical equipment, Mr. Boes replied: "Our first investment in electrical equipment was an electric range which did away with all fuel carrying and dirt. As my wife spends more time cooking, canning and baking than required for any other type of work on the farm, we found the electric range a real labor saver. The coolness and comfort that was obtained during the summer months proved the superiority of electric cooking over the old way, and to our surprise the expense of operating the electric range was no more than what we had previousy paid for coal..

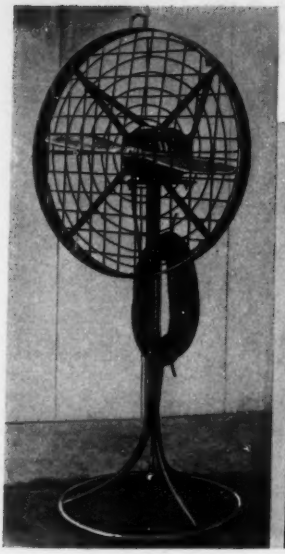
"The next piece of equipment we became interested in was a feed grinder, as we were feeding about one hundred hogs, twelve cows and four hundred chickens. After some investigation we decided to buy a hammer mill designed to be operated with a five-horsepower motor. The mill that we installed can be used to elevate small grain as well as grind feed. When elevating grain the blower is operated direct and at reduced speed, which eliminates the cracking of the grain. The mill when operated in this manner, will handle the output of the largest threshing machine. The mill operates semi-automatically, as we have overhead bins and when we care to grind, all we have to do is to regulate the proper flow of grain into the hopper of the mill. The ground grain is then blown into an adjoining bin where it is stored until used. The grinding costs for electricity vary with the type of feed ground, but will average one cent or less per bushel.

"We were brooding about eight hundred chicks that spring, so we installed electric brooders of an approved type. The cost of operating the brooders during March and April was 1.5 cents per chick, which was less than the cost of operating our coal stoves. What a relief when we found out that one did not have to get up in the night and look at the fire and see if the chicks were comfortable. The ever constant menace of fire was eliminated, and the chicks were healthier when raised in a cold brooder house. One should never try to brood over 300 chicks in one house even when using the large size brooders. A good rule to follow is to provide about 40 sq. ft. of floor space per 100 chicks.

"Then came a very important step, as previous to this time the water supply for the home and livestock depended upon the operation of a windmill, which was satisfactory only when the wind blew. So in July, 1931, we installed a ¾-horsepower deep well pressure system of four hundred fifty gallons per hour capacity. We were told by a pump dealer that a shallow well pump would work, but as the water level was about twenty feet we thought it more practical to insure an uninterrupted supply of water, should the water level ever fall. The cost of pumping per one thousand gallons is seven cents, and we have spent no money for repairs on the pump since it was installed.

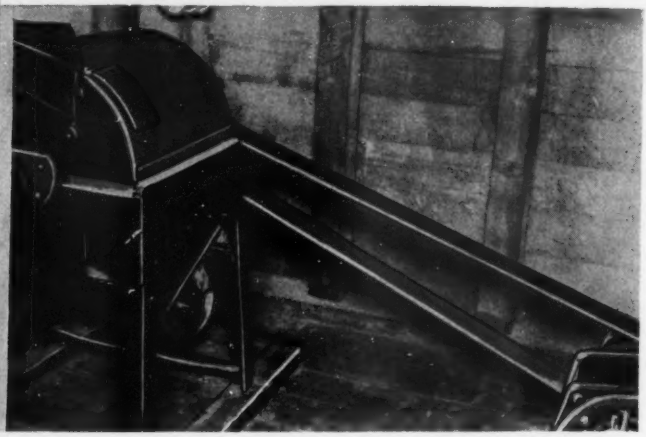
"The next step in electrifying our farm was to install lights in the poultry house. In the fall of 1932, we had three hundred fifty laying hens from which we were securing a forty percent production. After installing lights, the production increased to seventy percent. This increase in egg production paid our total monthly electric bill. In lighting our poultry house, we used 40-watts of lighting for every two hundred square feet of floor space. The use of light also served as burglar insurance, as we do not know of a single case where chickens were stolen from a lighted house. The increased egg production was maintained by the aid of poultry water heaters which enabled us to keep warm water available for the chickens to drink even though the outside temperature was below zero. The best results were secured when the water temperature was maintained at fifty degrees Fahrenheit.

"During the early part of 1933 we installed a shallow well pressure system which supplied soft water to the kitchen, bath and laundry room. As the cost of operating this pump was approximately fifteen cents per month, we felt that we could no longer afford to use our old inconvenient equipment. This system enables us to have hot water wherever needed, as we soon installed a coil in the furnace. With a furnace coil, we had to depend upon the range to heat the water in the summer, so we purchased a thirty gallon electric water heater in December, 1934, and now we have the furnace coil and electric water heater hooked up in series, so even in the winter during warm days when the water temperature would normally drop, the electric heater maintains a temperature of one hundred forty degrees. This system supplies an



Left: This fan changes the atmosphere in the barn at the rate of 4,500 cubic feet of air per minute.

Below: The feed grinder stood second in line of purchase and a five horsepower motor supplies the operating power.



abundance of hot water without the laborious task of carrying or heating it.

"This past summer when hay-making time arrived, we had an electrician build a fan with a twenty-four-inch blade which is protected by a heavy metal shield. This fan is operated by a 1,750 R.P.M. quarter-horsepower split phase motor and moves about forty-five hundred cubic feet of air per minute. The fan is mounted on a stand that we placed in front of a window in the gable end of the barn. We also use this fan in the cow stable when milking to keep the flies from the cows and of course at the same time it keeps us cool. The cost of operating this fan is less than two cents per day and the cows seem to enjoy the cooling breezes as we no longer have any trouble in getting them to enter the barn at milking time.

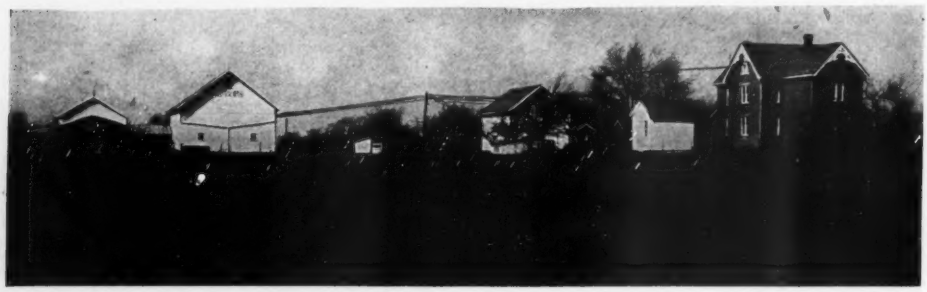
"As the basement in our home is cool in the summer months, we never considered electric refrigeration seriously until this summer. Last fall we became convinced that we could no longer afford to be without adequate refrigeration, so we purchased a 6 cu. ft. electric refrigerator. In the short period of time we have used it, we have saved several dollars worth of food that otherwise would have spoiled. We now wish that we had installed a refrigerator sooner so as to have been able to enjoy the benefits derived from its use during the hot weather of the past summer.

"Another recent addition to our equipment is a ½-horsepower motor in our farm shop, operating a drill press and emery stone. This equipment helps us to make minor repairs on the farm, thus saving both time and money.

"My wife's Christmas present was an electric mixer with attachments. After using it to prepare about six gallons of mince-meat, we concluded that this appliance is one of the necessary items to be included in the list of household equipment.

"In addition to the appliances previously mentioned, we also use a radio, iron, washer, sweeper, toaster, percolator, curling iron, space heater, clocks and waffle iron. The total connected load on the farm in wattage is approximately 22,000 and this equipment plus the wiring cost represents an investment of $1,125, which is not excessive when one compares the value of the benefits from the use of electricity. We have proven to our own satisfaction that the extension of electric service into the rural areas is the greatest aid that the farmer can secure in placing agriculture on a sound economic basis."

The Boes farm west of Tiffin, Ohio.



MEAT ON THE TABLE

By
VERA B. MEACHAM

WHEN I began to keep house myself I had a vague idea that cooking meat was a mere matter of thrusting it, salted and peppered and dredged with flour, into a hot oven, or dropping it into the sizzling fat in a frying pan.

To be sure, the results frequently gave me the uneasy notion that other folks were better cooks than I, but scientific studies of time and temperature cooking had not yet been made, and if they had they would have done me small good, for I had no idea of the temperatures in my oven. It was either hot enough or it wasn't—my guess the judge.

My niece, who was married a year or two ago, looks on cooking in quite different fashion. She doesn't pay as much attention to cook books as I did.

"Most of them aren't up to date enough, Aunt Vera," she explains, condescendingly.

But she pours over half a dozen women's magazines each month, and she knows just what method the United States Department of Agriculture recommends for cooking cured pork, because she has the bulletin on it. For the same reason she knows just what temperature the Missouri Agricultural Experiment Station found best for beef, and she relies on the latest recipe books put out by the National Live Stock Board in both cooking and buying meat for her table.

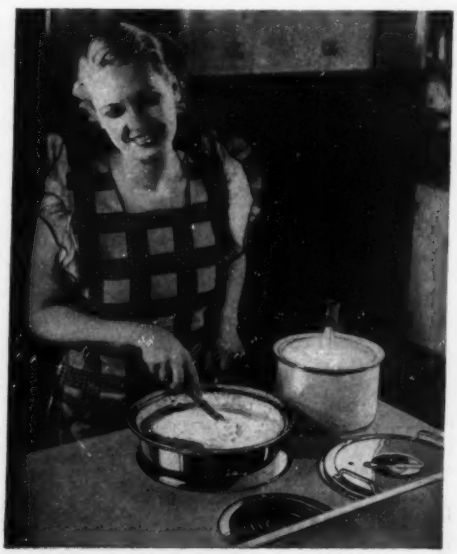
She would not have the vaguest idea how a hot oven would feel on the back of her hand, but she knows to a degree where to set the pointer on her oven thermostat, or what her meat thermometer should read if she wants her meat rare.

This is a lucky day for cooks to be living in, because luck has become old fashioned and science has taken both cooking and cook stoves in hand.

When engineers put thermostatic controls on ovens they made a signal contribution to the standards of all our cooking. Research in meat cookery could not have gone on without this definite knowledge of, as well as control over, oven temperatures.

The research I am speaking of has been going on for some time. The United States Department of Agriculture, the National Live Stock Board, and various agricultural colleges have been trying

A chuck roast in the well cooker needs no watching.



Set the temperature for 325 degrees, and turn on the current.

to determine the factors which have a bearing on the quality and palatability of meat.

Already their work has gone far enough to completely overturn many of our old notions. It has on roasting. It is the unanimous opinion of these experts that we should put a roast into an uncovered pan, with no water, on a rack, if there are no bones to keep it out of the drippings, and that we should cook it slowly, with a moderate temperature. And a moderate temperature seems to be from 300 to 350 degrees.

Almost at once some of you owners of electric ranges, who cook by temperature, are going to rise up in excitement and cry out:

"But you can't sear a roast at 300 degrees."

Of course you can't. But these folks who have been looking into the matter say that searing is a very questionable practice, anyway. First of all, they feel that they have quite disproved the idea that searing holds the juices in. Searing does not make the roast taste better; it just makes it look better.

They admit, of course, that looks are not to be ignored. So, for folks who feel they must have a brown, crusty roast, a 15-minute period of high temperature either at the beginning or the end of the cooking is suggested.

Cooking the roasts at a constant temperature is certainly an easier method than our old way of fifteen minutes of this or half an hour of that before the roast settled down to the right heat. This new low temperature they recommend produces a juicy, well-flavored roast, evenly done and highly appetizing.

If you were to look over the reports of some of these tests you would find that roasts cooked at extremely high temperatures had cooking losses of over 30 per cent, and roasts cooked at extremely low temperatures showed a loss of about 7 per cent. The cooking temperature, then, is not just a factor in some theoretical excellence in the results. It is something that touches our pocket books every time we buy a roast of beef. Less meat goes farther when it is cooked at moderate temperatures.

If we are cooking on an electric range, we can set the oven control for the right temperature and cook our meat, according to some reliable table, a certain number of minutes to the pound, differing for different cuts and kinds of meat, with no fuss or attention throughout the roasting time.

Using a Meat Thermometer

Or, if we want to carry this scientific cookery still further, we can overcome the differences that arise from the varying size and shape of roasts, and the difference in the temperature of the meat when it goes into the oven, by using a meat thermometer. A meat thermometer has a pointed end. You push it into the roast so the bulb is somewhere near the center. You have to make sure that it does not rest on either bone or fat, but is embedded in the meat itself. When the thermometer registers the right amount—170 degrees for a roast of beef well done, for instance—you know the roast it ready to come out.

The temperature is different for different meats and for rare and well-done roasts of the same

Put the roast in an uncovered pan without water.

kind. Some of the new thermometers have markings for the various meats, and for rare and medium and well done, instead of for degrees of temperature, just as some automatic irons say "linen, silk, wool" instead of "hot and medium."

The well cookers on many electric ranges make convenient ovens for small roasts. You can watch their temperature rise there quite as well as though they were in the larger oven. It is probable though that they offer even greater advantages in cooking those pieces of meat that these tactful students of meat cookery call "less tender."

Now I would not seem to imply that with modern methods preparing meat for our tables is merely a matter of knowing how hot the oven should be and how long the meat should cook. It begins much farther back than that, with a knowledge of cuts and the best way to cook them—the tender cuts by dry heat, the less tender by moist heat, or a combination of the two.

Location of Tender Meat Cuts

If you have helped to take care of meat at butchering time yourself you need no diagram to show you that the tender cuts are up along the backbone and in the top of the carcass, and that, as you go down the flank and the fore and hind legs, you run into pieces with more connective tissue. Those are the parts that need long, slow cooking, but they are quite as nourishing and can be quite as tasty as the tenderer cuts.

Suppose you were to take four or five pounds of the chuck or the rump. You could season it well and tie or skewer it into shape. Then brown it in a little fat in the bottom of the cooker. Add half a cup of water and put on the cover. You would turn the current on high until the water comes to a boil and steam comes out around the cover, then turn the switch to low. You could add onion, carrots and potatoes about an hour before the meat is done, and you would have most of your dinner ready in that kettle.

You did not have to keep an eye on the fire to have that pot roast simmer quietly, instead of galumphing away at a galloping boil. You did not have to watch it to keep it from burning dry. It just cooked steadily at a low, safe temperature until it was done.

Broiling has not been an easy process in most kitchens since we discarded the open fire of coals in the fireplace. But the electric range gives us back an easier, safe way to broil. The top oven unit becomes an ideal broiler, because it provides a steady, intense heat. Steaks or chops, ground beef as well as sirloin, vegetables as well as fruits, are excellent broiled.

Pan broiling, putting the meat into a hot spider with just the merest film of grease, searing it quickly on both sides and then lowering the temperature to cook the meat tender more slowly, is a simple matter when you can have the heat exactly as you want it by changing the position of a switch.

The accurately controlled temperature of these units on top of the stove makes the long, slow cooking you want for stews, for Swiss steaks, and for the countless combinations your own ingenuity will dictate an easier manner, too.

Modern methods of meat cookery demand careful attention to temperature. The electric range provides any heat you want—no more, no less—just by turning it on.

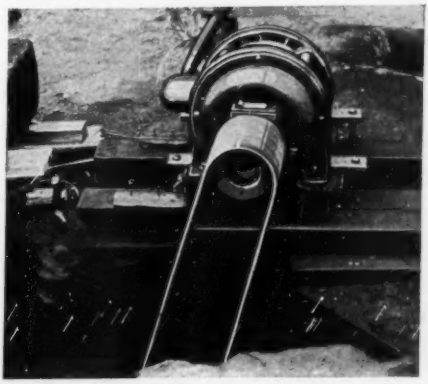
MOTOR
Saves Two Hours a Day

By E. N. Gatlin

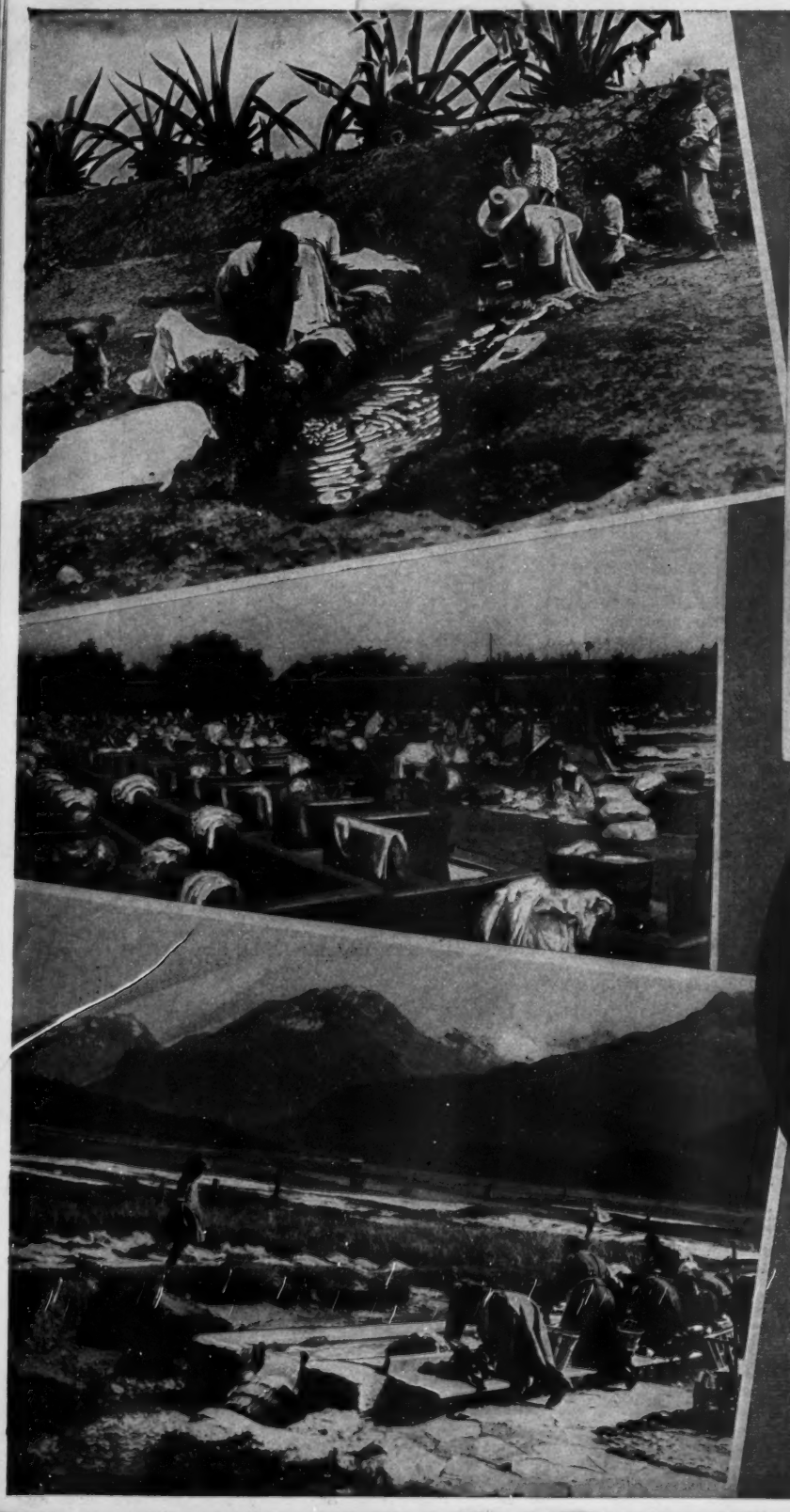
IN the Govalle territory near Austin, Texas, J. T. Sanders is known as one of the thriftiest and most progressive truck farmers. The Govalle territory, a highly specialized irrigated truck rais-

Mr. Sanders in one of his irrigated bean patches, during an exceptionally dry month.

ing section, obtains water for irrigation purposes from shallow wells. When "hi-line" service was extended to Mr. Sanders he installed the 5 h.p. motor shown below on his irrigation pump. He says that before obtaining electric service, oftentimes two or three hours per day of his time were spent in making repairs and keeping in operation the engine used for pumping. Usage of the motor completely eliminated those duties. This labor saving feature of electric pumping has enabled him to spend considerably more of his time working in his truck patches.



Irrigation pump operated by a 5 H.P. motor furnishes water for irrigation on the Sanders farm.



Above: The mode
"blue Monday" whe
trically equipped lau

WASH

Upper left: Near the city limits of Mexico City, the household laundrywork is as primitive as when Eve washed Adam's first grass pillowcase.

Left center: A washerman in Bombay, India, is called a dhoby, hence dhobydom means the native washing place.

Lower left: The public wash place at Samaden, Switzerland, is equipped with concrete troughs through which a mountain stream flows. The linens are spread on the grass to dry.

Upper center: Whether it be for navigation or washing, the Tone River in Japan serves both purposes equally well.

Upper right: This freshly washed laundry is spread out on the banks of the Suchiate River at Ajutala, border line between Mexico and Guatemala, the river serving as a washtub.

Lower right: No modern conveniences are available for these women who have come to the public wash place in the Innsbruch region of the Austrian Alps.

ne modern laundry. There's no
lay" where there is a modern elec-
ipped laundry to banish drudgery.

SHDAY 'ROUND THE WORLD

ELECTRICAL HOUSEKEEPING

Conducted by GAIL MERREDITH

FOR SUMMER COLD

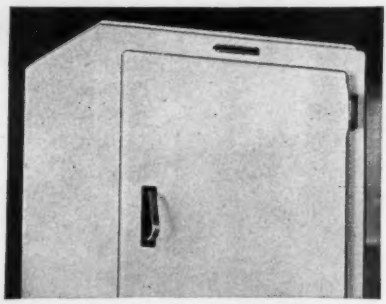
I LIKE to prowl about electric shops looking at refrigerators. If I could have what my deceased Aunt Dorcas used to call "My 'druther'", I'd have a new refrigerator each spring when the new models come on the market. There is always something new about them that makes mine seem old fashioned.

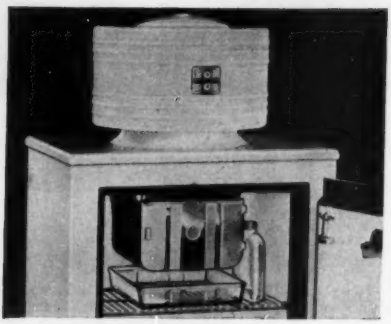
This year manufacturers lay claim to more effective insulation in their boxes, to improvements in the mechanism, to better built cabinets. I have in mind the actual construction of the cabinet itself, though there are some changes in the way they look, too. While some of them have broom high legs, easy to sweep under, some go way down to the floor and rest on a black base, recessed in front for toe room. Dust will have a hard time getting under there.

Each year more manufacturers are perfecting their mechanism to the point where they can seal it up, safe from dust and moisture, shut up in a perpetual bath of oil.

These improvements in construction, both of the cabinets and the cooling mechanism all help to cut down the operating cost. In fact, I found one that will run, so its makers insist, on the same amount of current demanded by a 30-watt lamp.

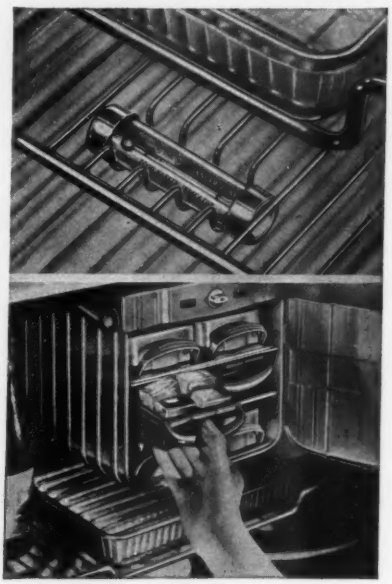
Another thing that is lowering the cost of running an electric refrigerator is the variable temperature controls. With different temperatures to choose from, all within the safety zone for food protection, you can turn a lever for fast freezing and replenish the ice cubes or freeze a dessert in a couple of hours; then turn it back to normal operation again. Or, if you are going away for a couple of days, and the refrigerator will be opened little, if at all, you can turn the control to get a higher temperature, but one that will still carry your food through safely when the refrigeration demands are low.





Top: Latches open at a touch on the new boxes.

Bottom: A gadget for loosening the trays hangs on the door.



Upper: A thermometer to check the cold in the refrigerator. Lower: Ice cubes pop out at a touch.

Even if this variable control had not this salutary effect on the budget, it would still be a great boon to the housewife to be able to hurry up the freezing on occasions of sudden guests.

In some of the new boxes I find that the manufacturers have set out to convince us by the evidence of our very own eyes that the temperature in the refrigerator is in the safety zone for food, above 32 and below 50 degrees. In one make there is a thermometer set into the door. In another, it is fixed in the middle of one of the shelves. With the temperature staring us in the face whenever we go to the refrigerator, we can be in no manner of doubt about the safe storage of our food.

Because the cabinets of good refrigerators have been well built for years, and mechanisms seem to their users well nigh perfect, we have not been able to sell all of these changes for ourselves. We rely on the integrity of manufacturers of good reput and on the trustworthiness of local dealers to

Everything you want to know about MODERN FARM REFRIGERATION

Send for G-E's New Book Just off the Press!

• Here's the first and only book of its kind ever printed on modern electric refrigeration for farms. You will find it an extremely valuable guide—whether you own or operate a truck farm, fruit farm, dairy farm, poultry farm, or butcher your own meat for sale or home use. It is profusely illustrated, interesting, instructive —includes many money-saving tips. We have had thousands of advance requests for this new book. Make sure of getting your copy by sending the coupon *today!* No cost or obligation.

MAIL THIS COUPON NOW!

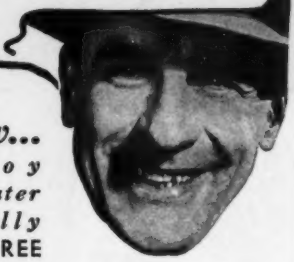
Commercial Refrigeration Division
General Electric Company, Section CZ-5
Nela Park, Cleveland, Ohio
Please send free copy of your new book on farm refrigeration.

Name _____
Address or R.F.D.No. _____
Town _____
County _____ State _____

GENERAL ELECTRIC

LET ME TELL YOU ABOUT

THE WORLD'S SIMPLEST ELECTRIC PUMP



Now... enjoy running water that's really TROUBLE-FREE

WESTCO—the world's simplest electric pump has only ONE moving part. And this ONE part operates without metal-to-metal contact. Think of it—Westco has—

NO Belts NO Valves NO Pistons NO Grinding

In fact, there are NO parts of any kind in a Westco which will wear and cause trouble.

Pumps 38% More Water

To ground floor or basement faucets, a Westco pumps 38% more water than its rated capacity *without increasing electric current consumption.* Guaranteed 28 ft. suction-lift (at sea level). Patented all-bronze Removable Liners assure lifetime service from pump casings. Rust-proof construction throughout. Beautifully finished in durable enamel. Quiet and cheap to operate. Never any expensive repair bills. Thousands of satisfied users. Sold on MONEY-BACK GUARANTEE.

Get FREE Catalog

Fill in the coupon below and mail it today! Free colorful Catalog will be sent. WESTCO PUMP CORPORATION, Davenport, Iowa. Branches and Warehouses: *New York, Philadelphia, Chicago, Los Angeles and San Francisco. Dealers everywhere.*

AMAZING LOW PRICE!

Westco

"The Original and Best Known Turbine Pumps in the World"

275 *gallons per hour Westco. Others up to 3000 G.P.H. Larger tanks available. All Westcos fully guaranteed.*

MAIL COUPON BEFORE YOU FORGET

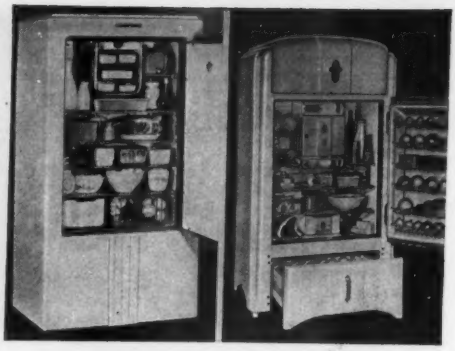
WESTCO PUMP CORPORATION, Davenport, Iowa. Dept. E-5. *Gentlemen: Without obligation, please send me FREE Westco Catalog.*

Name .....

St. or R.R. No. .....

Town .....

State .....



Left: Some cabinets are built without legs. Right: Glass dishes fit the shelves on the door. There is a bin for vegetables in the bottom of the refrigerator.

tell us that they are there. The changes that we can see for ourselves are small devices that increase the usability of the refrigerator.

The light inside the cabinet is a big help in keeping an eye on easily forgotten leftovers.

Shelves are taking a bow again. I found a useful portable shelf in one box. It is divided into sections and has a fence around it like a wire basket. You can lift it out of the refrigerator and carry it bodily to your work table. There are sliding shelves that come out straight and are held firmly in place without tipping. There is a semi-circular shelf that swings around to bring the back to the front and leaves the corners free for tall bottles. Some of the shelves are adjustable so you can change the height between them to fit the food you have to store. The refrigerator that has a row of shelves on the door has increased their usability this year by making a set of glass dishes for food, just big enough to set inside the rack.

Doors open easily if you just touch the handles with your finger, or arm or elbow. If they have a foot pedal, it works when you press it lightly with your toe.

Ice cubes trays are more amenable than ever.

You can lift the shelf out and carry it to the kitchen table.

Now a range that's as clean as the dishes

BY VIRGINIA FRANCIS

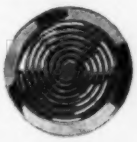
NOW you can wash your dishes backwards. Start with the pots and pans if you like. There is no soot to scour away. What's more you can wipe the range and dry it with your tea towel. You can—if you have a Hotpoint Electric Range!

This range is as easy to clean as a dish. The surface is porcelain—glazed like china. The glowing heat that comes from the Calrod units is absolutely free from "combustion dirt." The bottoms of the pots and pans stay bright and shiny. The stove does too! There is no deposit of soot and grime—no oily film is formed. And if food is spilled while you are cooking, it can be wiped away immediately, for the enamel work surface of the range never gets so hot as to be uncomfortable. Rounded corners and removable shelves in the oven make it easy to keep every part of a Hotpoint Range immaculately clean at all times.

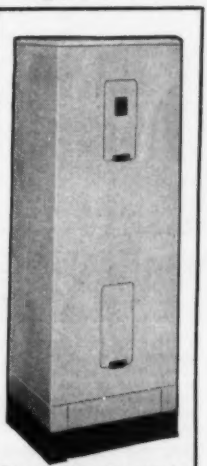
The beauty of all this is that electric cookery today is within the easy reach of almost everyone. The new ranges are lower in price than ever before. And rates for electric cooking have hit all-time lows. If you are building a new home or planning to remodel your present one, be sure to install a Hotpoint Electric Range and have a truly modern kitchen.

5 REASONS WHY Miracle Cookery is Possible with the Hotpoint Electric Range—Clean . . . Cool . . . Fast . . . Better Results . . . Economical

Send for free booklet: Do you want the key to better cooking and the secret of more time for recreation and leisure? Write for "Your Kitchen Modern." Address Virginia Francis, care Hotpoint Company, 5610 W. Taylor St., Chicago, Illinois.



CALROD—What Mazda means to light, Calrod means to cookery. Calrod is the name given to Hotpoint's hi-speed sealed-in-steel cooking coil which has revolutionized electric cookery. It brings new speed, new cleanliness and new economy to the kitchen.



The **VOGUE**—Hotpoint's new, modern style square-type water heater gives hot water every hour of the day or night without one minute's attention from you.

EDISON GENERAL ELECTRIC APPLIANCE CO., Inc.

5610 W. Taylor Street, Chicago, Illinois

ELECTRIC Hotpoint RANGES AND WATER HEATERS

Devices you can press and gadgets that pry trays painlessly from the chiller insure your getting them out without delay or temper. Rubber partitions, flexible metal dividers and a trick tray with some ingenious way of forcing the cubes out, one or a trayful, at the touch of your finger take care of that part of the business.

There are tightly covered metal pans for keeping vegetables and fruit crisp and fresh. Some of these hydrators as they are called are separate dishes and some are built to fit into a definite part of the box.

To make sure that no space is wasted, one manufacturer has built a big storage drawer in the bottom of his cabinet. It is not cooled, but it makes an excellent place to store bulky sacks of vegetables, rows of cans, or any space taking supplies.

I notice that several manufacturers have moved the freezing unit over to the center of the boxes. They maintain that this gives better storage space for bottles, and it certainly makes it easier to clean around the unit.

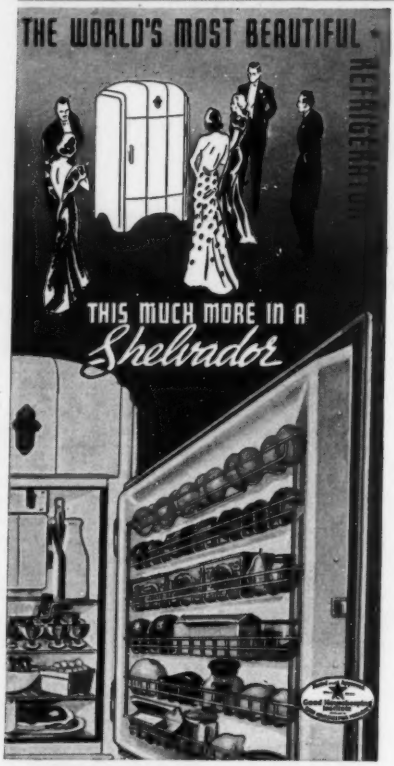
• • •

TIPS ON TOASTERS

TIP the toaster now and then and brush out the crumbs with a soft brush. Letting them collect is not only unsightly but may cause a short circuit if they get into the heating element. The prongs that fit into the plug on the cord need to be kept clean. When they begin to rust or corrode the electrical connection is not good and they sputter and flash, in what the engineers call arcing. This will char the wires in the plug of the cord and eventually put it out of service.

If you can get at the prongs on your toaster, you can clean them with a fine file or a bit of emery cloth. If you can't, it may be wise to take the toaster in to some service man who can take it apart and clean it up for you.

Remember not to leave the toaster on when you are not using it. That's not merely to avoid wasting current; it is because the heating element in any electric appliance is made to last a certain number of hours. Waste shortens its effective life.



ONLY THE SHELVADOR offers this extra, usable space, this convenience and time-saving. Just open the door! There, at your finger-tips, are your most-often-needed foods. No reaching. No searching. No rolled sleeves or messed-up foods. In ordinary refrigerators an orange takes the shelf space of a milk bottle. In the **SHELVADOR**—fully insulated door— an orange takes the space of an orange! These exclusive advantages cost you nothing, so you might as well have them. 5 year protection plan, of course.

EXCLUSIVELY IN
CROSLEY
ELECTRIC REFRIGERATORS

Listening

It is not enough to listen to music or an address. It must be intelligent listening.

Three shop girls were enjoying a selection by the orchestra.

"Isn't it divine! Wonder what they're playing?" said Madge.

"It's the sextette from 'Lucia'," announced Tillie positively.

"No, it's 'Tales from Hoffman'," persisted Annabelle.

"I think that you are both wrong; but there's a card up there—I'll go and see for myself!" announced Madge, suiting the action to the word. She came back triumphant.

"You're way off, girls! It's the 'Refrain from Spitting'."

A little boy was playing near a stream which ran across the road when a motorist came along and asked if it were deep.

"It isn't deep at all," answered the boy.

So the motorist started to drive his car through. But when he had gone in only a little way, he found the water was level with the floor of his car.

"I thought you said it wasn't deep," he cried.

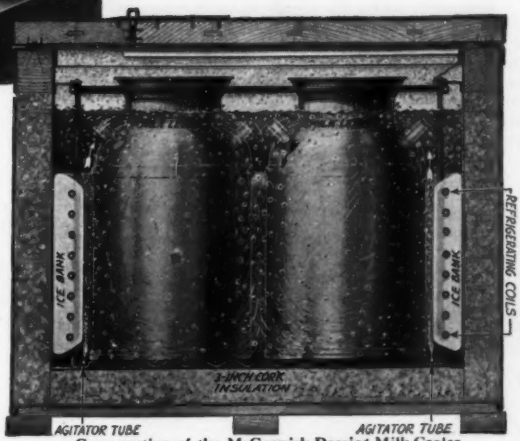
"It isn't," replied the boy. "Gee it only covers up the middle of the ducks."

International Harvester *Announces*

New McCormick-Deering MILK COOLERS

The New McCormick-Deering Milk Cooler. Note how the compressor unit is mounted integrally with the box.

The Only Coolers with Pneumatic Water Agitation



Cross-section of the McCormick-Deering Milk Cooler showing how the ice-cold water circulates all around the cans.

A compact, simple, fast-cooling milk cooler, manufactured, assembled, and tested *complete* (including *both* box and compressor unit) at the factory. That's the brand-new McCormick-Deering, another product of International Harvester designed to aid the dairy farmer in keeping down the bacteria count in milk.

The McCormick-Deering cools milk to a temperature of 50 degrees or lower in an hour or less twice every 24 hours, and automatically maintains the temperature regardless of the weather. The pneumatic water agitator, an *exclusive* McCormick-Deering feature, makes this rapid cooling possible. It forces the air into the water from the bottom of the box and the constantly rising bubbles cause the water to scrub over the ice bank, thoroughly chilling the water and keeping it circulating all around the cans, from the bottom up to and over the milk level.

Many other features of design and construction contribute to the high efficiency of the McCormick-Deering. Ask the nearest McCormick-Deering dealer to tell you all about this advanced method of cooling milk.

INTERNATIONAL HARVESTER COMPANY
(*Incorporated*)
606 SO. MICHIGAN AVE. CHICAGO, ILLINOIS

McCORMICK-DEERING

ON THE AIR

Conducted by JEROME J. HENRY

How Lum and Abner Found Theme Song

"OUR names are Lum and Abner and we're looking for a theme song for our program. Have you anything you think we might use?"

A young woman clerk in a Cleveland, Ohio, music store brought out a flock of records.

"Here's one I think would make a nice theme song," she said. "It's called, 'Eleanor' and was composed by a Cleveland woman, Jessie L. Deppen."

That's how theme songs are born. Lum and Abner approved the song immediately and have used it as their identifying melody since the day in November, 1932, when it was suggested to them. It is not, of course, played on a phonograph, but on the pipe organ.

Lum and Abner tried three other theme songs during the year or so they were on the air before they chose, "Eleanor." The first was "Arkansas Traveler," the second "Romance of All My Dreams." Then Walter Blaufuss, the National Farm and Home Hour conductor, wrote a song for them called, "Pine Ridge." They used it until they "discovered" "Eleanor."

• • •

Bob Burns and Bazooka in Pictures

THE outstanding new radio star in 1935, according to the judgment of radio editors, is going back into the movies again. He is Bob Burns. You've been hearing him for a number of months on Bing Crosby's music hall broadcasts.

Here's Bob Burns with the bazooka, that peculiar musical instrument fashioned from two pieces of gas pipe and a whiskey funnel.

Now he's going to play an important part in a picture to be made by Crosby.

Less than a year ago he left Hollywood dejectedly, after what he considered a failure in pictures. Now he comes back to the studios with a greater reputation than ever before, and a contract that recognizes that fact.

All of this is due to his dry, human humor. His stories, or rather comments, are told in a style so popular and original that most listeners become his admirers as soon as they hear him.

His bazooka is even more unusual than his humor, if that can be possible. This is a musical instrument which he invented back in Arkansas, about thirty years ago. Its construction involves two pieces of gas pipe and a whiskey funnel. All during his years in vaudeville, tent shows, pictures and radio the bazooka has been a Bob Burns's trade mark. As he goes back to the screen as an acknowledged star, he refuses to leave the bazooka behind. Soon we shall all be able to see as well as hear him play it.

• • •

David Harum Coming to Radio

DAVID HARUM, the beloved Yankee character who was immortalized on the screen by the late Will Rogers,, may now be heard on the air in a new series of programs over NBC stations. Wilmer Walter, veteran stage and radio character actor, plays the leading role in these

RUNNING WATER
Figure 562 Worm Drive Deep Well Water System
YOUR FAMILY DESERVES IT!
DEMING
WATER SYSTEMS
• Here is the outstanding pump success of 1935. The quietest and safest Deep Well Water System — can be purchased for as low as $106.00 F.O.B. Salem, Ohio.
Before you buy any water system get this FREE forty page catalog—completely describing Deming Pumps for shallow or deep wells, for operation by electricity, gasoline engine, windmill or by hand.
See your banker about financing Deming water systems and their installations under the National Housing Act.
WRITE for this FREE Catalog
THE DEMING CO.
52 BROADWAY • SALEM, OHIO
Pump Manufacturers Since 1880

sketches. The radio story is a continuation or sequel rather than an adaptation of the Westcott novel. It presents David Harum as a more mellow, more philosophical small town character, official guardian of everyone's problems.

Romance plays an important part in the serial. The love interest is supplied by Harum's niece, Susan Price, and Charles Cullom, with David playing Cupid.

Wilmer Walter is a native of Philadelphia. He invaded the field of drama to win a bet, liked the footlights and decided to stay. He played in stock and in road shows throughout the United States and Canada for several years and then on Broadway. He toured from coast to coast in the title role of "Ben Hur." Walter was one of the first stage stars to see the possibilities of radio drama, and he has starred in many microphone dramatic productions. He is a descendant of Thomas U. Walter, the architect who designed and built the dome of the United States Capitol in Washington, D. C.

• • •

At Last He Gets the Bird to Talk

FRED ALLEN has finally succeeded in getting his talking bird to talk. The bird, a chattering Mynah from the hills of India, after keeping an embarrassing silence on two broadcasts, came through in grand style on its third appearance. And there's a reason.

"I'm going to give listeners a talking bird if I have to sprout feathers myself," Fred vowed after the bird went silent on him for two successive times. Fred did sprout feathers, an Indian headdress, which certain members of the Seminole tribe might have recognized as bearing a strong resemblance to their chief's top piece.

Fred put on the feathered get-up and his favorite scowl and held a tete-a-tete with the Mynah bird. The result was that the Mynah bird proved to be as loquacious as any of the other amateurs presented on the program. He counted up to seven, asked for a cup of coffee and permission to go to the movies.

• • •

Buck Rogers Resembles Hero He Plays

MATTHEW CROWLEY, like the hero he plays in the CBS adventure series, "Buck Rogers in the 25th Century," has always taken a keen interest in the science of electricity.

At the age of 12 he was busy at his New Haven, Connecticut, home putting odd bits of wood, metal, and wire together, building a radio set after school hours. When he received his first message over his home made device, Matthew had visions of becoming another Steinmetz.

A youthful tendency to stutter changed his aspirations from electronics to histrionics. He took elocution lessons to overcome his handicap, and this in turn developed his memorizing abilities.

A few months after finishing his radio set, the boy was engaged to play with a stock company in New Haven. This stage debut was even more thrilling than picking up words out of the air, and Matthew decided to become an actor. After graduating from high school he enrolled at the Yale school of drama. With this training, young

(*Continued on page 32*)

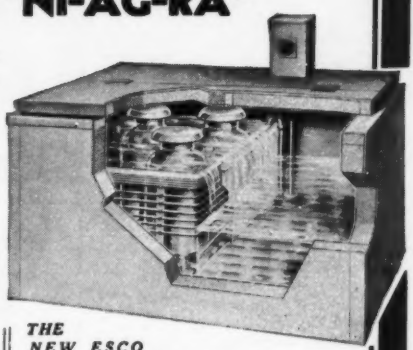
MILK COOLING SPEEDED UP
With the New ESCO "NI-AG-RA"

The New Esco "NI-AG-RA" with the AUTOMATIC WATER LEVELER is the very last word in Electric Milk Cooling Equipment. Icy cold water is maintained at constant level and circulates until your milk is cooled to proper temperature of 50° or below.

The New Esco "NI-AG-RA" is automatic and dependable. Proper cooling makes your milk more saleable . . . Reduces your bacteria count . . . and will make more money for you.

An Esco Electric Milk Cooler will pay for itself from the very start. Thousands of dairymen have testified that an Esco Cooler is a money making investment.

WRITE TODAY . . . get FREE Booklet telling you how you can get better milk and make more money.



THE NEW ESCO "NI-AG-RA" Electric MILK COOLER GIVES— Rapid Cooling of Milk to 50° or lower in one hour . . . Automatic circulation . . . Constant water level up around neck of can . . . Highest efficiency . . . Economical operation.

ESCO

ESCO CABINET COMPANY

525 E. BIDDLE ST. WEST CHESTER, PA.

ESCO IS THE ORIGINAL PATENTED MILK COOLER

Don't Wish
Ask us for it!

THIS page is for our readers—to help you get all the necessary facts about any or all of the electric operated equipment that you may want to use on your farm. Its a FREE SERVICE and NO OBLIGATION is involved.

Before you ask for information be sure to study the advertising pages in this magazine. These manufacturers are best equipped and all prepared to serve you.

The applicants for electricity listed at the left are best known and most popular. You should be thoroughly informed on the possibilities for every one of them.

Complete details about any of these or the hundreds of other applications for electricity can be obtained by merely filling out and sending us the coupon at the bottom of this page.

Use This Free Coupon Now

FOR THE HOME

—Better Sight Lamps
—Clocks
—Clothes Washers
—Dishwashers
—Flat Irons
—Floor Polishes
—Food Preparing Machines
—Ice Cream Freezers
—Ironing Machines
—Radios
—Ranges
—Range Replacement Units
—Refrigerators
—Sewing Machines
—Table Cooking Appliances
—Tea Kettles
—Vacuum Cleaners
—Water Heaters

FOR FARMING OPERATIONS

—Animal Clippers
—Automatic Water Systems
—Bottle Washers
—Bunch Tyers
—Burglar Alarms
—Brooders
—Churns
—Corn Shellers
—Cream Separators
—Dairy Sterilizers
—Drills
—Drinking Fountain Warmers
—Electric Lawn Mowers
—Ensilage Cutters
—Feed Grinders
—Feed Mixers
—Floodlights
—Hay Hoists
—Incubators
—Insect Traps and Screens
—Light for Plant Growth
—Milk Coolers
—Milking Machines
—Motors
—Paint Sprayers
—Septic Tanks
—Sheep Shears
—Soil Heating Equipment
—Soldering Irons
—Stationary Spray Plants
—Thermostats
—Time Switches
—Tool Grinders
—Ultraviolet Light
—Vegetable Washers
—Ventilators
—Woodworking Machinery

ELECTRICITY ON THE FARM
24 W. 40th St., New York

Without cost to me, please have the manufacturers send complete information on the following Electrically Operated Equipment which I am thinking of buying.

.....

.....

My name is.....

Address .....

.....

I get my electricity from.....

.....

5-36

Orchard Irrigation

(*Continued from page 9*)

to orchard irrigation than the overhead sprinklers.

"Ground sprinklers, however, require additional piping and equipment to irrigate an acre area, as compared with the overhead sprinklers.

"The sprinkler system of irrigation seems admirably adapted to the light, sandy, steep hillside soils, where pumping costs are not prohibitive."

The writer visited several orchardists in the Wenatchee Valley, who had changed from the surface method of irrigation to the sprinkler system, and while the sprinkler system has not come into wide-spread use yet, there are some orchardists who favor it. One particular grower, who has had experience with both methods reports that:

"With the sprinkler method of irrigation I do a better job of irrigating the land, with half the water."

It might be added that this particular farm was quite hilly, rough, and hard to irrigate by surface method. This orchardist says further:

"Sprinkling is especially adapted to gravelly soil, or land with gravelly subsoil. Another feature in favor of sprinkler irrigation is that it takes one man half a day each day to handle the water on any place under the old flooding system, whereas with the sprinklers it requires only one hour a day for one man. Much water is wasted in flooding, on account of over-soaking the land at the top of the runs, before the land in the lower part of the runs is wet. Flooding irrigation is also very hard on the land, because it washes the plant food down through the soil. The waste from evaporation in sprinkling is not nearly as great as the waste in flooding irrigation by seepage and run-off."

Another orchardist reports:

"We get better value from the manure by sprinkling than by flooding. In sprinkling the manure is thoroughly soaked by each irrigation, while with flooding, the manure and decaying alfalfa on the ground is seldom wet. I have alfalfa growing in my orchard as a cover crop, and in places it lay there for five years without making good fertilizer. This condition was changed when we began sprinkling. It began rotting at once."

Some orchardists have tried to apply sprinkler irrigation with their stationary spray piping. According to the State College specialists, in their bulletin No. 268, "Irrigation of Orchards by Sprinkling," the pump of the stationary spray plant is designed for pumping comparatively small quantities of liquids against high pressures, and therefore is not usually satisfactory for pumping irrigation water.

Ordinarily, stationary spray system pipes are small, and offer excessive resistance to the flow of large quantities of irrigation water.

Style

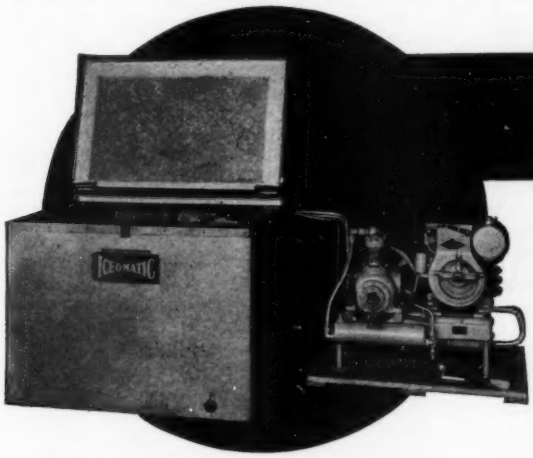
Style is no respecter of persons.

He was a stout man, with large, broad feet, and although several pairs of boots were shown to him he refused them.

"I must have square toes," he explained to the assistant.

The young man sighed. "But square toes are not stocked now, sir," he insisted. "Pointed toes are fashionable this season."

The stout man gave an angry stare. "That may be," he retorted, "but I happen to be wearing last season's feet."



MAKE MORE MILK MONEY

with

ICE-O-MATIC

Williams' Engineered

ICE-O-MATIC gets down to 50° quick! Keeps bacteria from multiplying. Makes more milk money for you. Ice-O-Matic uses Methyl Chloride, one of the best known refrigerants. Electric or Gas Engine Powered. Built to take care of unexpected loads. Costs less to run . . . lasts longer. Investigate. SAVE.

WILLIAMS OIL-O-MATIC HEATING CORP.
World's Largest Specialists in Temperature Control
Bloomington, Illinois

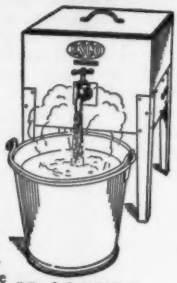
WILLIAMS ICE-O-MATIC REFRIGERATION

HOT WATER
Quickly . . . and At Little Cost!

Get this New ESCO ELECTRIC WATER HEATER for dairies. Will heat 3 gallons of 60° water to 170° in one hour.

Only $18.00 F.O.B. FACTORY

It costs so little to GET HOT WATER THIS EASY WAY! No trouble . . . No labor . . . SAVES TIME AND MONEY. Just what you want for washing pails, strainers and other milk equipment. ALL THE HOT WATER YOU WANT WHEN YOU WANT IT.



ESCO Electric Dairy Water Heaters are built in several sizes. They are durable and efficient. Easy to use and COST BUT LITTLE!

ESCO

Order TODAY . . . or write for descriptive Bulletin

Model MH-4

ESCO CABINET CO.

524 E. Biddle St. West Chester, Pa.

Planning New Building or Wiring Extensions?

. . Then Send for this

FREE FACT MANUAL

SEND MONEY SAVING FACT MANUAL which shows how I can secure More Electrical Conveniences at Low Cost.
(Print Name and Address in Page Margin)

Get the Facts about the Porcelain Knob and Tube wiring system before you invest! Find out why 90% of all farms are wired with this most economical, safest and permanent system. You can have your entire farm including barns and yards electrified at a cost within the limits of your pocketbook. This Fact Manual shows you the way. Included is a large 18" x 22" wiring diagram with installation instructions that show why the knob and tube system is the quickest and easiest to have installed. Also 16 pages of money saving information you can't afford to be without. Mail the coupon today . . . or write Dept. A . . . there is no cost or obligation whatsoever.

USE Porcelain Safety Company

STANDARD ELECTRICAL PORCELAIN MANUFACTURERS

201 N WELLS ST., CHICAGO, ILLINOIS

Questions and Answers

Conducted by H. J. GALLAGHER

Question: *I have signed up with our power company for service this fall. We have a* 120-*acre dairy farm that I would like to electrify, but the most I can spend this year, or for a number of years unless things change, is* $250. *I would appreciate your advice on how to spend this money to the best advantage. The lowest wiring price I have had on the house and barns is* $120 *without fixtures. By the time I add* $50 *or* $60 *for fixtures there would not be much left.*

Is'nt there some way I can cut my wiring costs, and what equipment would be the most practical at first? B. T. T.

Answer: Your problem is universal in nature; there are so many things desired when electricity becomes available that comparatively few can finance a complete program. A large percentage of new customers do not even have $250.00 to begin with.

In the first place, to stretch $250 to the limit, I would install a 60-ampere three-wire service and have a good wiring job in the house, including plenty of convenience outlets and switches, without fixtures. This can ordinarily be done in the average size house for about $60.

A low priced, attractive fixture in both the dining room and living room with two good table lamps of the indirect lighting type for reading could be installed for $15.00. Ordinary porcelain receptacles costing about 20 cents each could be used throughout the rest of the house. These receptacles could later be used in outbuildings when finances permitted the change to better fixtures.

Possibly the wiring of the barn could be delayed a year or so, because in the last analysis the real value of electricity is in improving the living conditions in the home.

A water system and a washing machine should be the first equipment purchased. There is the possibility of connecting an electric motor to any power washer; the same would apply for a water system, the use of a ¼ or ½ H. P. motor on a pump jack.

Study the possibility of adding motors to the equipment you have.

Substitute all gas engines with electric motors. The saving in operation costs will help pay the monthly electric bill. Motorizing the equipment you have will permit the purchase of more equipment and appliances and return greater value on electric service. By following this plan there may be enough to install a skeleton wiring system in the barn for lights. If a balance still remains and the family is large, I would strongly recommend an ironing machine as one of the big labor savers in the house.

In other words, cut on the frills and extend the utility value to the limit. The electric program, like all other farm programs, is a matter of development throughout the years.

Indigestion

"Dear Doctor: My pet billy goat is seriously ill from eating a complete leather-bound set of Shakespeare. What do you prescribe?"

Answer: "Am sending Literary Digest by return mail."

What's New

Reviewed by T. E. HIENTON

Names and addresses of manufacturers of the articles described in this column will gladly be furnished upon request. Address your requests to What's New Department, ELECTRICITY ON THE FARM, *24 West 40th Street, New York, N. Y.*

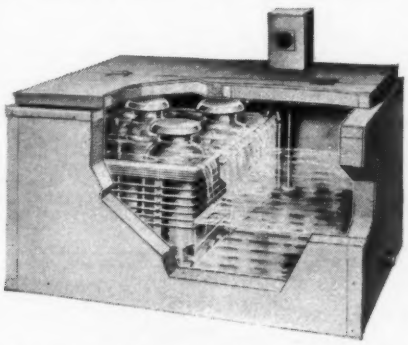
Electric Dairy Sterilizer

Sterilization of dairy utensils by heat is required by law in at least one state of the United States, California. In other sections of the country this practice of sterilization with heat has been stimulated by the development of electrically heated sterilizers.

The announcement of the addition of a new low-priced model to a line of electric dairy sterilizers has been made by an eastern manufacturer. This model is 25¾ inches long, 15½ inches wide and 25 inches deep, inside dimensions. It is heated by a 750-watt, alternating current heating unit which is controlled by an automatic one-hour time switch. Two inches of rock wool insulate the bottom and walls, while one inch is used in the top.

Milk-Cooling Tank

The need for proper cooling of milk is no longer questioned by practical dairymen. The matter of greater importance to them is the selection of proper equipment to do the cooling quickly and economically. Well insulated cooling tanks and electrically driven refrigeration machines of



proper capacities are furnishing the answer on many dairy farms.

The manufacturer of a milk-cooling tank, which

(*Continued on page* 33)

HOT WATER ANYWHERE ON YOUR FARM *with this portable unit*

Heats water with **40% less electricity** than electric range. Plugs into any convenience outlet—2 pints of boiling water in less than 6 minutes (capacity 5 pints). Lightweight, easy to carry. Indispensable on the farm. Use it in the poultry house to mix a warm mash for the hens; in the dairy to wash the cream separator; in dressing poultry for the market; anywhere in the home—heating baby's milk or washing baby's clothes, washing dishes, hot water for bathing, in the sickroom, or for a dozen other uses. **See your power company or electrical dealer**—or write WEST BEND ALUMINUM CO., WEST BEND, WIS. Price with heavy rubber cord, $7.50, postpaid.

Speedmaster

HAY CHOPPING

Makes Haying *Easier Faster*

Doubles Mow Capacity

Two men with a Papec can put up hay faster, easier and cheaper than three men using a harpoon fork. No one works in the hot, dusty mow. Chopped hay is *blown* into the barn, takes *half* the usual space, keeps in better condition, feeds out much easier, is eaten without waste, often steps up milk production, makes beef and mutton gains cheaper. A Papec Hay Chopper, *without any change*, is also the best silo filler obtainable. Chops straw direct from thresher. Shreds fodder. For booklet and reports of users, send coupon or postal.

Send For Full Information

Papec Machine Co., 795 S. Main St., Shortsville, N. Y.
Send free copy of "A Better Way To Put Up Hay" describing the Papec Haying System and Papec Hay Chopper-Silo Fillers.

Name (please print) .....

Address .....

PAPEC
HAY CHOPPER-SILO FILLER

DUROBAR

All Weather Electric Screens

THEY WORK IN RAIN

Kill the fly outside. Save that constant expense of sprays. They last a life time. No cost after the first cost. No work. No worry. No servicing.

Get The Moth Or Beetle With Durobar Ag Panels

Save your orchard or garden crop without sprays. Once installed, no further expense. Get a 100% perfect crop and a paying investment. Installation specifications and placement plans furnished gratis.

Write for circulars and prices. Start now. Get the early fly or moth. Write today to

National Electric Screen Co.

Dept. E-F 4

Chicago, Illinois

New 1936 Model
SOUTH BEND LATHE
$75
LESS MOTOR DRIVE
Write for details on this 9 in. x 3 ft. Workshop Precision, back-geared, screw-cutting Lathe. Made in 6 different drives, 4 bed lengths. Easy Payment Terms arranged over extended period of time. Complete information on request.
FREE
WRITE FOR Catalog 15
WEIGHS 310 Lbs. Crated
SOUTH BEND LATHE WORKS
327 E. MADISON ST. SOUTH BEND, IND. U.S.A.

SAVE HAYING TIME AND LABOR
HANDLES YOUR HAY FORK "AT"
IRELAND HOIST
For use with one, two or three phase Electric Motors. Get motor and full data from your local power dealer.
PAYS FOR ITSELF THE 1st SEASON
"Unloads 3 times faster"—"Saves man and team" "Worth 3 times the money I paid"—"Certainly works well"—"Can't go wrong with an Ireland Hoist"
Quick in action with perfect control. Capacity 1200 pounds direct pull. Thousands in use.
Write for Descriptive Illustrated Folder
IRELAND MACHINE & FOUNDRY CO. NORWICH, N. Y.

On the Air

(*Continued from page 27*)

Crowley was able to come to New York and win a part in "The Front Page."

After his success on the stage, he became interested in the possibilities of radio drama. One day he was to be given an audition at an advertising agency. He arrived early and found that ahead of him was a young lady trying for the part of Wilma Deering, heroine of the Buck Rogers series. Matthew was asked to read Buck's lines with her. When they had finished about ten pages the director said he was sorry he couldn't use the girl, but he wanted Crowley for the title role. Thus it was that on November 6, 1932, Matthew Crowley gave his first radio performance.

Crowley is a little more than six feet tall, weighs 180 pounds, names tennis as his favorite sport, but also rides horseback and swims well. He prefers life in the country or near the seashore. He hates crowds in the New York subways and doesn't like being poked with umbrellas on a rainy day.

• • •

And How the Lion Roared

JANE PICKENS had an experience recently that she thinks really ranks as an experience. She was singing "When a Gypsy Makes His Violin Cry" on a network broadcast and in it she included a vocal violin cadenza.

From below the stage came an odd sound, a moaning that rose to a roar as Miss Pickens hit high notes and increased her volume.

Investigation showed the obbligato coming from lions in their cages below the stage. It seems the cadenza stirred a responsive chord in them, and they chimed in. And that, says Miss Pickens, really was an experience.

CLASSIFIED ADVERTISING

DO NOT OVERHEAT YOUR BIRDS. Make your late season brooding safe and easy by using the modern Lyon Fan Unit. Can be installed in many types of brooders. No drafts or hot spots. Supplies the correct amount of warmed fresh air and makes both dry litter and proper ventilation easy to obtain. Write for free catalog describing BROODERS, ALARMS, FLY ELECTROCUTORS, ELECTRIC SUPPLIES FOR HOME-MADE EQUIPMENT, ETC. LYON ELECTRIC CO., DEPT. EF, SAN DIEGO, CALIF.

MAKE YOUR OWN WATER HEATER: For $6, WE FURNISH all necessary ELECTRICAL EQUIPMENT (INCLUDING 1,000 Watt CHROMOLOX HEATING UNIT) with complete instructions. Your tinsmith can easily follow instructions and save you money. Our price: COMPLETE 10 gallon water heater, $18.50. ELECTRIC FARM EQUIPMENT CO., Lynnfield, Mass.

FOR LATER BROODING — use WARNER ELECTRIC BROODERS: Extremely low heat cost; no danger of overheating chicks; ventilation keeps floor dry. Built to performance standards not to meet price. For FREE DESCRIPTIVE FOLDER describing unique features, write WARNER BROODER & APPLIANCE CO., North Manchester, Indiana.

HOW TO TELL TIME BY THE STARS—New illustrated booklet fully explains how and why. Fascinating pastime. Easy to learn. Single copies postpaid, 5 for $1.00, including Jr. Sky Map FREE. Next Year's Best, Mount Vernon, N. Y.

IDEAL HAY HOIST operates Hay Carrier with 2 to 5 H.P. motor or engine. Saves extra team and driver all through busy haying season. 10 DAYS' FREE TRIAL. Write for circular 206, UNIVERSAL HOIST & MFG. CO., CEDAR FALLS, IOWA.

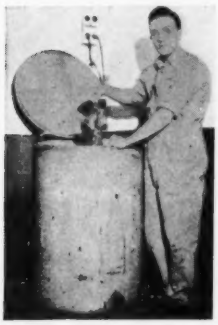
What's New

(*Continued from page* 31)

maintains the water level at a constant level around the cans, has recently announced a new cooler which is available in twelve sizes, varying from two to twenty cans. An automatic water leveler maintains a constant water level in one side of the tank which is up around the necks of the cans. As cans are immersed, the surplus water pours over the leveler into the opposite side. A circulator-agitator takes water from the side, which usually is at the lower level, and forces it over the water leveler and out through a distribution pipe to agitate the water around the cans. This circulator-agitator is controlled by an automatic time switch which is started by hand but stops automatically at the end of one hour.

Poultry Semi-Scalders

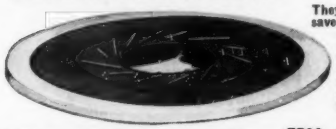
Semi-scalding poultry has become an accepted practice during recent years, both by the large commercial establishments as well as the poultryman who retails his own fowls. The semi-scalding process aids in loosening feather follicles without skin burn and also eliminates storage scald where poultry is frozen and stored. Electric semi-scalders, with their automatic controls, readily provide uniform temperatures and convenient operation.



Seven models of electric poultry semi-scalders are offered by an eastern manufacturer. These vary in size from 14 by 16 inches to 24 by 32 inches inside dimensions. The smallest size has no insulation but three other sizes are available with one or three inches of insulation. The two medium sizes are heated by two 1,000-watt heaters while the smallest is heated by one such heater and the largest by three of them. They are available for either of 115 or 230-volt operation. Thermostat, heating units and relay are built into the insulating wall of the tank.

Speed up your electric range!
Replace old or burned out units with

CHROMALOX SUPER-SPEED BURNERS



They cook quicker, save electric power, last longer. They fit any electric range. Write us for details, or ask your power company or local electrical store.

Edwin L. Wiegand Co. 7580 Thomas Blvd. Pittsburgh, Pa.

ASK YOUR POWER COMPANY for a DEMONSTRATION

STERILIZE DAIRY UTENSILS
and MAKE MORE MONEY!

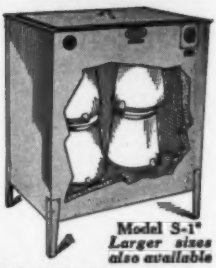
Here's a new sterilizer at SENSATIONAL SAVINGS. $48. F.O.B. factory. Only ESCO management and materials could make such value possible.

Only $48.00 F.O.B. FACTORY

Sterilize all dairy utensils this easy way. Kill bacteria. . . . Lower your bacteria count and GET MORE MONEY FOR YOUR MILK.

ESCO Electric Sterilizers combine thorough sterilization with complete drying, automatically. Cost so little to operate and mean such a big improvement in your milk.

You save time and labor.

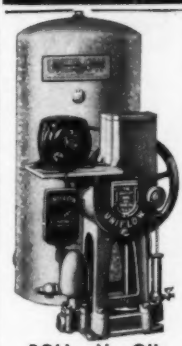


Model S-1" *Larger sizes also available*

ESCO

ORDER TODAY . . . or write for descriptive pamphlet.

ESCO CABINET COMPANY
523 E. Biddle St. West Chester, Pa.



ROLL - N - OIL
Complete from
$95.00
up
DEEP WELL SYSTEM

Hire a MAN to do a MAN'S work.

With electricity "on tap," an electric automatic pump is the cheapest "hired man" you can employ on your farm. Because it is such a profitable investment, we urge you to select a pumping system that will give you quiet, trouble-free service for years and years. Uniflows give you automatic water pressure service, better and cheaper than city folks have.

Our free catalog shows you why the Roll-N-Oil Deep Well System pictured will always give you unsurpassed quiet operation—why its long life is certain—why it is economical of current and how easy it is to oil or to get at any part.

By all means buy a proved pumping system for it's with you a long time. Write today—state your problem and you'll be proud of the Uniflow Deep or Shallow Well System that we recommend. Address Uniflow Mfg. Co., 1556 E. Lake Rd., Erie, Pa.

Deep and Shallow Well Water Systems - Water Softeners - Septic Tanks - Cellar Drainers - Refrigerated Milk Coolers - Domestic Refrigerators

A Century Single Phase Brush-Lifting Motor on the Job

The PRIZE *Motor* FOR ALL FARM JOBS!

Since the early days of farm electrification, Century Single Phase Motors have helped many farm families get more work done, with less effort, in less time, at less cost.

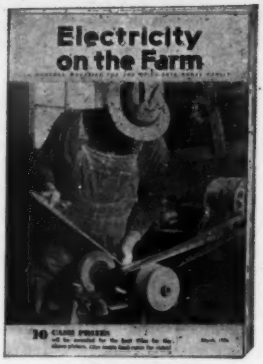
By doing the hard back-breaking jobs such as pumping water, grinding, shredding, baling, feed mixing, sawing wood—they have provided greater comfort, more leisure and all around better living conditions!

A 24-hour-a-day dependable hired hand—Century is The PRIZE Motor For All Farm Jobs.

Century MOTORS

CENTURY
ELECTRIC COMPANY
1806 Pine Street St. Louis, Mo.
Offices and Stock Points in Principal Cities

COVER TITLE CONTEST



MARCH COVER

RULES

May Cover Contest

Ten cash prizes will be awarded for the 10 best titles for the picture on the front cover of this magazine.

The first prize will be $20 cash, and nine second prizes of $2 in cash will be awarded.

In case of a tie, each winning contestant will receive the full cash prize to which he or she is entitled.

Titles should be brief — the shorter the better — and short slogans will be given preference over rhymes.

All members of the farm family to whom this magazine was sent may submit titles, but each contestant may submit only one title.

Question "A" must be answered.

Entries must be sent to the Title Editor, ELECTRICITY ON THE FARM, 6 North Michigan Avenue, Chicago, Illinois, before June 1st.

Winning names and titles will be announced in the July issue.

Send your title on the coupon or make out a similar form on a plain sheet of paper or government postcard.

Awards for March

First Prize — $20

"Takes the grind out of life and puts it on the tools."

ANDREW F. McCALL, R.F.D. 1, Laurinburg, N. C.

Nine $2.00 Cash Prizes

"The motor driven grinding wheel
Will put an edge on toughest steel."

W. A. PERRINS, JR., Westford, Mass.

"A better 'share'
With electric care."

A. V. BENSON, R.F.D. 2, Loveland, Colo.

"Electricity does its 'share' toward spring plowing."

ETHEL F. WAHLGREN, R.F.D. 1, Washington, Neb.

"Plowshare serviced—'lectric shop—
Deeper furrow—larger crop."

MRS. JOHN K. BROWN, R.F.D. 1, Walden, N. Y.

"Spring is here—plowshares blunt,
Power grinders do the stunt."

WILLIAM FREITAG, JR., R.F.D. 2, Hales Corners, Wis.

"Electricity turns it round and round;
To grind the share that turns the ground."

LeROY WINKLER, R.F.D. 3, Creston, Iowa.

"Electrically ground—
Ready for another round."

CARL P. LARSON, Hampden, Mass.

"A push of the button, a whirl of the wheel,
It takes electricity to sharpen the steel."

ERNEST C. FALK, R.F.D. 2, Irving, N. Y.

"Electricity grinds them sharp and snappy,
They stay in the ground—they make me happy."

JOHN GOLATA, R.F.D. 1, Granger, Ind.

My title for the May Front Cover picture of ELECTRICITY ON THE FARM is.....

.....

.....

.....

(a) Do you have a vacuum cleaner?..... Give name and address of dealer from whom you bought it.....

.....

.....

My name is..... R.F.D.....

Post Office..... County..... State..... 5-36

cooking on the farm . . . . .

simpler, easier, and more convenient with an

electric range

Electric cooking does away with many hours of tedious pot watching. Automatic time and temperature control take over most of the cooking job. The time released can be more profitably used on the thousand and one other things the farm homemaker has to do. Electric cooking is so satisfactory, too. Better meals could not be prepared in any other way.

ASK YOUR POWER COMPANY

or your favorite electrical dealer for any further information that you need. Or, if you prefer, address your inquiries to ELECTRICITY ON THE FARM, 24 W. 40th St., New York, or 6 No. Michigan Ave., Chicago.